

PATENT SPECIFICATION

DRAWINGS ATTACHED

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COMPLETE SPECIFICATION

Dispensing Head for Aerosol Container

We, STEVENS DUNN Ltd., a corporation organized under the laws of the State of Delaware, United States of America, of 1450 Broadway, New York, Sun of New York, 5
United States of America, do hereby declare the invention for which we pray that a patent may be granted to us and the method by which it is to be performed to be particularly described in and by the following writing:

This invention relates to a dispensing head in the form of a cover cap for co-operating with the valve stem of a pressurized aerosol container for the administration of therapeutic agents in the form of a vapor or fine mist, and including means whereby the vapor may be locally applied as desired by the user, the cover cap being constructed to be used as a cap and promoter for the valve stem of the aerosol container when the device is not in use so that it is easily carried in pocket or purse without appreciable danger of leakage or accidental extraction.

It is the desire to provide the cap with an available air passage only when an aerosol is dispensed for reducing spray.

It is the desire the dispensing head includes an auxiliary problem on the part of the user, such as is the problem shown in the British patent No. 846,713, but at the same time the aerosol valve is protected, protecting and detecting of the dispensing head to valve stem is eliminated, and the dispensing head may always be engaged with the valve stem of the aerosol container.

In accordance with the present invention there is provided a dispensing head for an aerosol container charged with a self-propelling liquid composition and equipped with an inherently dispensable and removable valve stem, said head comprising a cylindrical body member adapted to fit on the container, a delivery tube having an inlet communication to the oral cavity of the user, an air inlet permitting entry of air into the aerosol container via the oral cavity of the user, and delivery tube being substantially straight and being formed as an integral part of the cylindrical body member and mounted substantially perpendicularly thereto, a dispensable button slightly positioned within the cylindrical body member to move axially thereto so as to engage said valve stem for dispensing the latter, said button being maintained in normaloperative position by the resilient action of said stem, said air inlet comprising an opening in the cylindrical body member through which a portion of said dispensable button extends, the dispensable button normally closing said air inlet but opening the same upon being depressed.

Reference is made to the accompanying drawings illustrating a specific embodiment of the invention in which:

Fig. 1 is a perspective view illustrating the device with the closure cap in place;

Fig. 2 is a sectional view through the device showing the construction thereof;

Fig. 3 is a partial view similar to Fig. 2 but showing the valve depressed;

Fig. 4 is a plan view, looking in the direction of arrow 4 in Fig. 2;

Fig. 5 is a plan view on an enlarged scale of the cap of the dispensable button, and

Fig. 6 is a bottom plan view thereof.

For the purpose of illustrating the invention, the same is shown in Figs. 1 and 2 as being applied to an aerosol container 10. As shown in Fig. 2, the aerosol container is provided with a stepped nozzle neck portion 12 and other features which supports the dispensable valve stem 14 and is well known to the art when the valve stem is passed inwardly in the direction of the arrow 16, a spray will be emitted from the end of the valve stem 14 in the usual manner. The aerosol container can be of the aerosol type or it can be a continuous type as desired.

The dispensing head which comprises the subject matter of the present invention is

[Price 4s. 6d.]

FIGS. 1-6.

7. A dispensing head according to any one of the preceding claims, performed on a stepped neck portion of an aerosol container so as to be substantially permanently fitted on said neck portion with the dispensable button engaging the valve stem of the aerosol container.

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8. A dispensing head for an aerosol container substantially as herein described with reference to the accompanying drawings.

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generally indicated by the reference numeral 12. In the first place there is generally provided a passage 60 communicating with another passage 64 at an angle thereto forming the spray orifice. When the button 26 is in the down position (Fig. 1), a spray is ejected from the uppermost corner of the cylindrical body member 22 and when this occurs it will be seen that an adjacent air passage 66 is provided because the inclined surface 18 of the button 26 drops away from the inclined surface 40 in the top portion of the cylindrical member 20.

WHAT WE CLAIM IS:

1. A dispensing head for an aerosol container charged with a self-propelling liquid composition and equipped with an inherently dispensable and removable valve stem, said head comprising a cylindrical body member adapted to fit on the container, a delivery tube shaped for administration of the aerosol composition to the oral cavity of the user, an air inlet permitting entry of air with the aerosol content within the delivery tube, said delivery tube being substantially straight and being formed as an integral part of the cylindrical body member and mounted substantially perpendicularly thereto, a dispensable button slightly positioned within the cylindrical body member to move axially thereto so as to engage said valve stem for dispensing the latter, said button being maintained in normaloperative position by the resilient action of said stem, said air inlet comprising an opening in the cylindrical body member through which a portion of said dispensable button extends, the dispensable button normally closing said air inlet but opening the same upon being depressed.
2. A dispensing head according to claim 1, in which the air inlet is defined by an inclined surface 18 of the button 26 forming a part of the side of the opening 24. This accommodates the wall at 34 of button 26 and also in effect forms an upper stop for it. The inclined walls at 34 and 40 have a transversal surface 36 extending above the flat top 22 and below the part of portion 20 above top 22.
3. Referring more particularly now to the construction of the button 26, it will be seen that this is provided at its upper end with an inclined or bevelled wall 40 forming a part of the side of the opening 24. This accommodates the wall at 34 of button 26 and also in effect forms an upper stop for it. The inclined walls at 34 and 40 have a transversal surface 36 extending above the flat top 22 and below the part of portion 20 above top 22.
4. Referring more particularly now to the construction of the button 26, it will be seen that this is provided at its upper end with an inclined or bevelled wall 40 forming a part of the side of the opening 24. This accommodates the wall at 34 of button 26 and also in effect forms an upper stop for it. The inclined walls at 34 and 40 have a transversal surface 36 extending above the flat top 22 and below the part of portion 20 above top 22.
5. A dispensing head according to claim 2, in which the mounting inclined walls have transversal surfaces.
6. A dispensing head according to any one of the preceding claims, which comprises a finger piece on said dispensable button normally extending into close proximity with the top surface of a projection of the delivery tube.
7. A dispensing head according to claim 4, in which in the nonoperative position of the button the spray orifice is spaced slightly below the top surface of the projection of the delivery tube.
8. A dispensing head according to any one of the preceding claims, which includes a closure cap adapted for reception on the mouth portion of the delivery tube.

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1 SHEET This drawing is a reproduction of the Original on a reduced scale

